

## ABSTRACT OF THE DISCLOSURE

Enforcing authorization in a shared process between at least two parties by identifying a sender of a message requesting an action as part of the shared process, determining the party of the sender, associating the sender's party with a business relationship between the sender's party and the receiver's party as defined by an electronic contract (without relying on a trusted third party to provide a common rooted key hierarchy), identifying terms and conditions of the electronic contract corresponding to the shared process, and verifying that the requested action corresponds to the terms and conditions and is allowable for the shared process by the sender. The electronic contract includes a first section to specify at least one party, other than the at least two parties, that represents a namespace corresponding to a domain of cryptographic keys, a second section to associate the at least two parties liable under the electronic contract with a public key of a cryptographic key pair from the domain for each of the at least two parties (without relying on a trusted third party to provide a common rooted key hierarchy), a third section to provide at least one of mapping of role names and sub-processes of the shared process, and a fourth section to allow each of the at least two parties to digitally sign at least a portion of the electronic contract with a private key of the cryptographic key pair for each of the at least two parties.